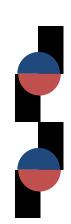
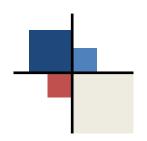


Natural Alternative Household cleaning Products/Recipes

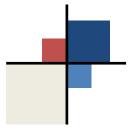














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Introduction

During a typical day in an American home, levels of chemicals in the indoor air can be hundreds or even thousand times higher than the outdoor air in the most polluted cities. In fact, indoor air pollution levels would be high enough to trigger an inspection by state or federal agencies in any workplace settings. Many of the chemicals in household products are similar in nature to those that are used in industrial settings. These dangerous chemicals can cause minor to serious and even life-threatening health problems. However, most household cleaning products and pesticides are reasonably safe when used as directed by the label.

Prior to WWII most households used relatively safe ingredients for cleaning that were commonly found in the home. With the rapid increase of petroleum-based chemicals after the war, corporations began to manufacture ready-made cleaning products. Today, most people are accustomed to buying a wide range of ready-made products that are custom designed for many surfaces, materials and rooms in their house.

Cleaning can be easily handled using less toxic products. Everyday ingredients like baking soda, vinegar, salt, lemon juice, vegetable oil, soap, borax, and hydrogen peroxide can do the same type of cleaning as commercial products. Because of consumer demand, many companies are looking at ways to make less toxic cleaning products.

This guide will explore the various common hazardous ingredients in cleaning products as well as give options for less toxic cleaning products.



Acetone - A neurotoxin, acetone may cause liver and kidney damage, and damage to the developing fetus. It is a skin and eye irritant. Found in spot treatment cleaners, mark and scuff removers, and other products.

Aerosol products- Aerosol propellants may contain propane, <u>formaldehyde</u>, a carcinogen, neurotoxin and central nervous system depressant, <u>methylene chloride</u>, a carcinogen, neurotoxin and reproductive toxin, and nitrous oxide. Products applied with aerosol sprays are broken into minute particles, which can be more deeply inhaled than larger particles, which may increase their toxic effect.



Ammonia - Undiluted, ammonia is a severe eye and respiratory irritant that can cause severe burning pain, and corrosive damage including chemical burns, cataracts and corneal damage. It can also cause kidney and liver damage. Repeated or prolonged exposure to vapors can result in bronchitis and pneumonia. Found in a wide range of cleaning products. Ammonia will react with bleach to form poisonous chlorine gas that can cause burning and watering of eyes, as well as burning of the nose and mouth.

Diethanolamine (DEA) - Listed as a suspected carcinogen by the State of California, this chemical is a skin and respiratory toxicant and a severe eye irritant. Used in a wide range of household cleaning products.

D-limonene - This chemical is produced by cold-pressing orange peels. The extracted oil is 90% d-limonene. It is a sensitizer, a neurotoxin, a moderate eye and skin irritant, and can trigger respiratory



distress when vapors are inhaled by some sensitive individuals. There is some evidence of carcinogenicity. D-limonene is the active ingredient in some insecticides. It is used as a solvent in many all-purpose cleaning products, especially 'citrus' and 'orange' cleaners. Also listed on labels as citrus oil and orange oil.

Ethoxylated nonyl phenol - Nonyl phenols are hormone disruptors and some contain traces of ethylene oxide, a known human carcinogen. They are eye and skin

irritants. Used in laundry detergents and other cleaning products.

Formaldehyde - In lab tests, formaldehyde has caused cancer and damaged DNA. Formaldehyde is also a sensitizer, with the potential to cause asthma. Several laboratory studies have shown it to be a central nervous system depressant. Exposure to formaldehyde may cause joint pain, depression, headaches, chest pains, ear infections, chronic fatigue, dizziness and loss of sleep. While formaldehyde naturally occurs in the human body in minute amounts, it is estimated that 20 per cent of people exposed to it will experience an allergic reaction. Used in a wide range of products, including some furniture polishes. Formaldehyde may be released by other chemicals.



Fragrance - Fragrance on a label can indicate the presence of up to 4,000 separate ingredients, most of which are synthetic. Many compounds in fragrance are human COES toxins and suspected or proven carcinogens. In 1989, the US National Institute of Occupational Safety and Health evaluated 2,983 fragrance chemicals for health effects. They identified 884 of them as toxic substances. Synthetic fragrances are known to trigger asthma attacks. The US Environmental Protection Agency found that 100% of perfumes contain toluene, which can cause liver, kidney and brain damage as well as damage to a developing fetus. Symptoms reported to the FDA from fragrance exposure have included headaches, dizziness, rashes, skin discoloration, violent coughing and vomiting, and allergic skin irritation. Clinical observations by medical doctors have shown that exposure to fragrances can affect the central nervous system, causing depression, hyperactivity, irritability, inability to cope, and other behavioral changes. Fragrance is a common skin irritant.

Methylene chloride - Methylene chloride is a carcinogen, a neurotoxin and a reproductive toxin. On inhalation, it can cause liver and brain damage, irregular heartbeat, and even heart attack. It is a severe

skin and moderate eye irritant. Used in stain removers.

Monoethanolamine - This chemical may cause liver, kidney and reproductive damage, as well as depression of the central nervous system. Inhalation of high concentrations when cleaning an oven for example - can cause dizziness or even coma. The chemical can also be absorbed through the skin. It is a moderate skin irritant, and a severe eye irritant. Found in many cleaning products, including oven cleaners, tub and tile

cleaners, laundry pre-soaks, floor strippers and carpet cleaners.

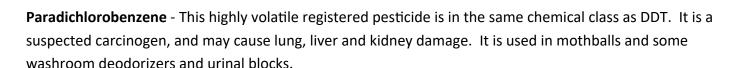
Morpholine - This corrosive ingredient can severely irritate and burn skin and eyes, and can even cause blindness if splashed in eyes. It can cause liver and kidney damage, and long-term exposure can result in bronchitis. It reacts with nitrites (added as a preservative in some products, or present as a contaminant) to form carcinogenic nitrosomines. Morpholine is a moderate to severe eye, skin and mucous membrane irritant. Used as a solvent in a number of cleaning products, including some furniture polishes and abrasive cleansers.

Naphthalene - This registered pesticide is listed as a suspected carcinogen in California and is most commonly found in mothballs, and some other pest repellants, as well as in deodorizers. As a reproductive toxin, it is transported across the placenta and can cause blood damage. It can cause liver and kidney damage, and corneal damage and cataracts. Skin exposure is especially dangerous to newborns.

Parabens - Parabens are hormone disruptors. Widely used in cleaning products as preservatives, paraben is usually preceded by the prefixes methyl-, ethyl-, butyl-, or propyl. Parabens may cause contact dermatitis

100g 200g

800g 1000g



Phosphoric acid - Extremely corrosive, it can severely irritate and burn the skin and eyes. Breathing vapors can make the lungs ache, and it may be toxic to the central nervous system. Found in some liquid dishwasher detergents, metal polishes, some disinfectants, and bathroom cleaners, especially those that remove lime and mildew.

Sodium dichloroisocyanurate dihydrate - This corrosive chemical is a severe eye, skin and respiratory irritant. It may cause liver and gastrointestinal damage, and may be toxic to the central nervous system. It will react with bleach to form poisonous chlorine gas that can cause burning and watering of eyes, as well as burning of the nose and mouth. It is found

some institutional dishwashing detergents.

Sodium hypochlorite (bleach) - A corrosive chemical, sodium hypochlorite is an eye, skin and respiratory irritant, as well as a sensitizer. It is especially hazardous to people with heart conditions or asthma, and can be fatal if swallowed. It may be a neurotoxin and toxic to the liver. Found in a wide range of household cleaners.

in some toilet bowl cleaners and deodorizers, as well as industrial detergents and

Sodium Lauryl Sulfate - Sodium lauryl sulfate (SLS) is used as a lathering agent. This chemical is a known skin irritant. It also enhances the allergic response to other toxins and allergens. The U.S. government has warned manufacturers of unacceptable levels of dioxin formation in some products containing this ingredient. SLS can react with other ingredients to form cancer-causing nitrosamines

Toluene - Exposure to toluene may cause liver, kidney and brain damage. It is also a reproductive toxin which can damage a developing fetus.

Turpentine - This chemical can cause allergic sensitization, and kidney, bladder and central nervous system damage. It is an eye irritant. Found in specialty solvent cleaners,







Air Freshener, Deodorizer, Odor Remover

Far from freshening air, chemical-based air fresheners and deodorizers add dangerous chemicals to the air we breathe. Air fresheners work by using a nerve-deadening chemical that interferes with our sense of smell, by coating nasal passage with an oily film, by masking an offending odor with a different odor, or by deactivating the odor.

Air fresheners are made from a number of chemicals including formaldehyde, a carcinogen and sensitizer, naphthalene, a suspected carcinogen, xylene, a neurotoxin and possible reproductive toxin, butane gas, a neurotoxin, cresol, ethanol, phenol and strong fragrances. Some solid deodorizers include the pesticide paradichlorobenzene, a carcinogen which can also cause liver and kidney damage. Aerosol air fresheners release chemicals as tiny particles which can be inhaled deeply into lungs and transferred into the blood stream. Plug in air fresheners break chemicals into even smaller particles.

The key to freshening air is to remove or dilute the offending odor (by cleaning, ventilation or absorption), not to cover it with another chemical.



Less-toxic Alternatives

- Watch Your Ozone Don't use air fresheners advertised as pine- or lemon-scented, especially during high outdoor pollution days.
- For ozone forecasts, visit Air Now. This is a great government sponsored website all about air quality.
- When using cleaning products, avoid the use of indoor air cleaning devices such as electrostatic precipitators and ionizers that can emit ozone.
- Remove bad odors instead of masking them; Open windows.
- Clean the source of the odor with non-toxic products.
- Empty the garbage frequently.
- Burn 100 percent pure beeswax candles with 100 percent cotton wicks—they purify and clean the air.
- Use an open box of baking soda for smelly rooms.
- Use indoor plants to clear carbon dioxide and other toxins.
- Use green tea to refresh your home.
- Perfume the air with natural scents.
- Simmer cinnamon and cloves, fresh ginger, or herbs in water on the stovetop.
- Simmer water with a drop or two of your favorite pure essential oil.
- Use organic sachets and potpourris.
- Try these other homemade **Home Sweeteners**.





All-Purpose Cleaner



Cleaners may contain ammonia, a strong irritant which can also cause kidney and liver damage, butyl cellusolve which is neurotoxic and rapidly penetrates skin, and ortho phenylphenol which is a severe eye and skin irritant. Many all-purpose cleaners contain DEA and TEA which can react with nitrites (added as undisclosed preservatives or present as contaminants) to form carcinogenic nitrosamines which readily penetrate the skin. Many colored products are made with carcinogenic coal tar colors. Hormone disrupting parabens may be used as preservatives. Many cleaners also include fragrances and detergents. Alternative brands may contain d-limonene, a sensitizer which can also cause respiratory distress as well as liver, kidney and nervous system

damage. D-limonene is a hazardous substance, although it is derived from a natural source.



Less-toxic Alternatives

Home-made Alternatives

Multipurpose Cleaner

4 tablespoons baking soda

1 quart warm water

How to use: Pour solution on a clean sponge and wipe



Microfiber cloths are a new addition to the world of cleaning which can significantly reduce use of chemical cleaning agents. These untreated, reusable cloths are made of polyester and polyamide, spun into tiny wedge shaped strands, 100 times finer than a human hair. They can lift off dirt, grease and dust without the need for cleaning chemicals, because they are formulated to penetrate and trap dirt. There are a number of different brands. A good quality cloth can last for several years.









Bleach

The main ingredient in chlorine bleach is sodium hypochlorite (chlorine added to lye.) Chlorine is toxic as a skin irritant, and by inhalation. Sodium hypochlorite can create poisonous chlorine gas if mixed with ammonia (which may be an unlabeled ingredient in some cleaning products) or with vinegar. Workplace safety data sheets warn that sodium hypochlorite may be a neurotoxin and cause liver damage. People with chemical sensitivities report adverse reactions to minute quantities of chlorine. Sodium hypochlorite

readily combines with organic matter to form organochlorines which are highly toxic to aquatic life.



Less-toxic Alternatives

- Hydrogen peroxide drug store dilution. Use 1/2 cup per wash load.
- Oxiclean oxygen bleach
- Simply Clean Oxygen bleach

Home-made Alternatives

- 3/4 cup 3% hydrogen peroxide
- 1/4 cup lemon juice
- 1 Tbsp. citric acid (optional—whitens clothes natural and helps to soften water, making this more effective in hard water)
- distilled water to fill
- 20 drops lemon essential oil

amber 1/2 gallon glass jug

DIRECTIONS

- Pour hydrogen peroxide, lemon juice, citric acid (if using), and lemon essential oil into an amber glass bottle. Swish around until citric acid is dissolved.
- Fill the rest of the jug with distilled water and use as you would bleach.



Tips

- Sunshine will whiten cotton and linen.
- Never combine chlorine bleach with ammonia or vinegar. Extremely toxic fumes will be produced.





Dishwashing Liquid (Hand)

Most dishwashing liquids contain detergents, coal tar based colours, and artificial fragrance. They may contain Quarternium 15, an eye and skin irritant which can release carcinogenic formaldehyde. If the label says "Do not use with chlorine bleach", then the product probably contains ammonia. Many dyes are known to be carcinogenic; they can penetrate the skin and

be deposited on dishes. Conventional detergents are petroleum-based.



Home-made Alternatives

Ingredients:

- 1/2 cup Castile Liquid Soap
- 1/2 cup water (distilled or boiled)
- 1 Tbsp vitamin E oil
- 1 Tbsp nourishing oil (sweet almond or jojoba oil)
- 5-10 drops essential oils

Instructions:

- 1. In a mason jar or soap dispenser, add water first (to prevent bubbles) then add the liquid castile soap, followed by the oils. Shake ingredients together.
- Shake the soap dispenser before using, then squirt a small amount on your hands as needed, rinsing with water.



Less-toxic Alternatives

Dishwasher Detergents

Many dishwasher detergents contain dry chlorine which is activated when dissolved in water. Chlorine fumes in the steam that leaks from dishwashers may cause eye irritation and difficulty breathing. Dishwasher detergents may also contain quarternium 15, an eye and skin irritant and an allergen which can release carcinogenic formaldehyde. Dyes and artificial fragrances are common ingredients.



Less-toxic Alternatives

Home-made Alternatives

Ingredients:

- 1 1/2 cups citric acid
- 1 1/2 cups washing soda
- 1/2 cup baking soda
- 1/2 cup sea salt

Directions:

Mix to combine. Use 1 Tbsp. per load.







Disinfectant

It's doubtful whether disinfectants are needed at all for most household uses. Ordinary cleanliness is sufficient to eliminate hazardous bacteria. Soap, water and rubbing (the old "wash your hands" requirement) is the best method to prevent disease. The fad for disinfectants and anti-bacterials is based on a false fear of germs. Homes do not require the same types of cleaning as hospitals, where disease and infection is common.



Besides being a waste of money, some brands of disinfectants use highly caustic chemicals like sodium hydroxide, sodium hypochlorite and phosphoric acid that can burn eyes and skin. Breathing vapors can burn lungs. Disinfectants may also contain phenols which can damage DNA as well as the liver, kidney and nervous systems, cresol, a suspected carcinogen and respiratory toxin, formaldehyde, a carcinogen, sensitizer and suspected central nervous system depressant, chlorine, a lung irritant, and alcohol. There are more than 300 different active ingredients approved for use in anti-microbial products, ingredients classified by the EPA as pesticides, because they kill microbes. In the Journal of Emerging Infectious Diseases, Dr. Elaine Larson wrote that because of potential health risks, antibacterial agents and disinfectants should be reserved for hospitals and home care of patients with suppressed immune systems.

Scientists are also concerned that products containing antibacterial and anti-microbial agents kill beneficial bacteria and contribute to the creation of antibiotic-resistant bacteria. Not all bacteria will be killed by antibacterial agents. The surviving bacteria are resistant to antibiotics and go on to produce new generations of resistant bacteria. Triclosan, one of the most popular antibacterial agents, creates dioxin, a carcinogen, as a by-product. Triclosan is a derivative of 2,4-D, an herbicide. There is concern that use of antibacterial products may affect human health.



Less-toxic Alternatives

- Alcohol
- Hydrogen peroxide drugstore dilution. Use undiluted...



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Home-made Alternatives

Ingredients:

2 cups water

20 drops of tea tree oil

2 Tbsp. white vinegar

1/s tsp. liquid dish soap

Directions:

Mix all ingredients together in a spray bottle. Shake well.





Drain Opener

Drain cleaners usually contain sodium hydroxide and sodium hypochlorite, which can cause permanent damage to skin and eyes on contact. Vapors can burn lungs. These chemicals are often mixed with ammonia or volatile petroleum distillates. Drain cleaners may also contain dimethylbenzyl ammonium chloride, a severe eye and skin irritant, and dichlorodifluromethane, an eye irritant which is also neurotoxic. Drain cleaners may be fatal if ingested. Biological products containing stabilized enzymes and bacteria are less toxic, equally effective and more environmentally friendly.



Less-toxic Alternatives

- Citra-Drain contains d-limonene
- Earth Enzymes Drain Opener available at health food stores
- TSP





Home-made Alternatives

Drain Cleaner

1/2 cup baking soda 1/2 cup white vinegar

Boiling water

Pour baking soda down drain. Add white vinegar and cover drain, if possible. Let sit for 5 minutes, then pour a kettle of boiling water down drain. (The vinegar and baking soda break down fatty acids, allowing the clog to wash down the drain.) This method can be used weekly to help prevent drain clogs. Do not use this method if you have used a commercial drain opener and it may still be present in the drain.

Drain Opener

Use a plunger. It may take a number of plunges to unclog the drain. Do not use this method if you have used a commercial drain opener as it may still be present in the drain.

Drain Cleaner and Opener

Use a flexible metal snake. It is usually more effective than chemical drain openers. The mechanical snake may be purchased or rented. Thread it down the clogged drain to push away obstruction.









Fabric Softener

Fabric softeners are designed to reduce static in synthetic fabrics. They serve no purpose with natural fabrics. Fabric softeners may contain quarternary ammonium compounds (quats) and imidazolidinyl, both of which are known formaldehyde releasers. For about 5% of people, quats are an extreme sensitizer. They may cause a variety of asthma-like symptoms, including respiratory arrest. Exposure to formaldehyde can cause joint pain, depression, headaches, chronic fatigue and a variety of other symptoms. In lab tests formaldehyde has caused cancer and damaged DNA. Both quaternium and imidazolidinyl can cause contact dermatitis. Fabric softeners work by leaving a residue on the fabric which never completely washes out. It can cause allergic reactions through skin contact and inhalation. Fabric softeners may also contain carcinogenic coal-tar dyes, ammonia and very strong scents. When fabric softeners are exposed to hot water, heat from dryers or ironing, vapors may be emitted which can be deeply inhaled, increasing their impact.

Less-toxic Alternatives

Because conventional fabric softeners contain so many harmful chemicals, even if they are free of added scents, they are not a good choice for less-toxic living.



Home-made Alternatives

Add 1/2 cup of white vinegar or baking soda to the rinse cycle to soften water and reduce static cling.

Laundry discs or balls (reusable) soften water and help reduce static cling.

A ball of aluminum foil in the dryer can reduce static cling without adding chemicals.

You may be able to dramatically reduce your use of fabric softener and still get the desired effect. One person reports she puts a dab of liquid softener on a damp washcloth, places it in her dryer and reuses the same washcloth for many loads without adding more softener. One bottle of softener lasts her years.



* Tips

To reduce static in synthetics, run dryer on "air dry" or "no heat" setting when laundry is almost dry, then hang clothes up until completely dry. This will also reduce the need for ironing.



Floor Cleaner, Wax, Polish

Conventional products often contain mineral spirits and petroleum solvents, both of which are neurotoxic and can cause severe eye and skin irritation as well as Stoddard solvent which is also neurotoxic. Petroleum solvents may contain traces of carcinogenic benzene. Some wax removers with ammonia contain tripropylene glycol monomethyl ether which can cause narcosis and kidney injury with repeated and prolonged skin exposure.

Less-toxic Alternatives

- Microfibre mop use with plain water (Expensive but a real revolution in mop technology. Rinses cleaner than other mop heads and saves money by eliminating cleaning products. Safe for hardwood floors.)
- Nature Clean Natural Floor Cleaner
- TSP (trisodium phosphate) can be used to eliminate built up dirt and grime. Use with care, it can dull or remove finishes on wood.

Home-made Alternatives

Floor Cleaner

Add 1 cup of vinegar to a pail of water.

Stronger Floor Cleaner

1/4 cup washing soda

1 tablespoon liquid castille soap

1/4 cup vinegar

8 litres hot water

Mix well to dissolve washing soda

Wood Floor Cleaner

1/4 cup liquid castille soap

1/2 to 1 cup vinegar

8 litres warm water

Wood Floor Polish I

1/8 cup olive oil or other vegetable oil

1 tablespoon vinegar

1 tablespoon vodka

Wood Floor Oil Polish II

Rub with olive oil.

Wood Floor Wax

1 cup olive, almond or walnut oil

1/2 cup vodka

30 - 40 grams grated beeswax

40 - 55 grams carnauba wax (depends on hardness desired).

Put oil and the waxes into a wide-mouth glass jar or tin can and set in pot of simmering water. Stir gently until waxes are dissolved. Remove from heat and add vodka, mixing well. Allow to harden. Use a rag to rub into the wood. If the rag "drags" too much, dip it into a tiny bit of oil.





Floor and Furniture Polish

Floor and furniture polishes can contain nitrobenzene, a carcinogen, reproductive toxin and central nervous system toxicant which can be absorbed through the skin, phenol, a carcinogen and severe skin irritant, as well as propane, butane gas, aliphatic naptha, petroleum distillates, white mineral oil and turpentine which are all neurotoxins, and may also be eye or skin irritants. Polishes may contain morpholine, a severe irritant which may cause kidney damage, as well as ammonia, detergents, and synthetic fragrance, Aerosol products create microscopic particles that can be inhaled deeply into lungs and transferred to the bloodstream. Some products contain carcinogenic formaldehyde and nitrosamines.



Less-toxic Alternatives

Home-made Alternatives

Polish with plain olive oil, almond or walnut oil.

Polish with food grade mineral oil. Although it is petroleum based it is non-volatile and relatively safe. Available in drug stores.

Furniture Polish

1 cup olive oil, almond or walnut oil

1/2 cup vinegar or lemon juice

Shake well and apply a small amount to a soft rag. Spread evenly over furniture surface. Polish with a dry cloth







Laundry Detergent

Most detergents are derived from petrochemical ingredients. They may contain bleaches, synthetic whiteners, and chemical fragrances, even in some so-called "fragrance free" brands. Some detergents may contain ammonia, ethanol, napthalene and phenol. Many liquid brands contain ethoxylated alcohols which can be contaminated with carcinogenic 1,4-dioxane. Detergent residues on clothes and bed linens can be a source of skin irritation, and lingering scents from scented products can cause respiratory and other reactions in both the user and others. Petroleum-based detergents cause more household poisonings than any other household product, (when eaten by children.) Laundry soaps, available as bar soaps or flakes, are usually made from natural minerals and fats and tend to be less toxic than conventional detergents.



Less Toxic Alternatives

Home-made Alternatives

Laundry Whitener

Add up to 1/2 cup of Arm & Hammer Washing Soda to washer.

Laundry Detergent

6 cups washing soda (Arm & Hammer Washing Soda)

3 bars of 4.5-5 ounce soap, finely grated (One made with coconut oil is the best)

Optional-lemon essential oil

Directions:

- 1. Cut soap into small chunks. Add to blender or food processer along with washing soda.
- 2. Blend until a fine powder.
- 3. Pour into clean container (keep the essential oil next to container and add 5 drops with each load).

To use:

Add 2-3 Tbsp per load

If washing whites, add 1/2 cup of hydrogen peroxide in the bleach compartment.

Add 1/2 cup vinegar to the fabric softener compartment.









Mold and Mildew Cleaners

Mold and mildew cleaners can contain formaldehyde, a carcinogen and sensitizer, phenol, kerosene, pentachlorophenol, chlorine and fungicides. The Environmental Protection Agency has classified more than 300 different active ingredients found in antimicrobial products including mold and mildew cleaners as pesticides. Although labels often warn that these cleaners can be hazardous as eye irritants, they are often sold as aerosol sprays, creating fine mists which can be deeply inhaled or contact eyes. See also, anti -bacterials

Less-toxic Alternatives

Hydrogen peroxide - drug store dilution. Apply full strength.

Home-made Alternatives

Strong All-Purpose Cleaner

2 teaspoon tea tree oil

2 cups water

Combine in a spray bottle, shake to blend, and spray on problem areas. Do not rinse. Makes two cups.



- Vinegar Spray- straight vinegar reportedly kills 82% of mold. Pour some white distilled vinegar straight into a spray bottle, spray on the moldy area, and let set without rinsing. Smell will dissipate in a few hours.
- Ultra-violet light (blue bulb) will kill mold.
- Wash with very strong black tea and let dry.



Oven Cleaner

Conventional oven cleaners create toxic fumes that can burn eyes, skin and internal organs. Lye and ammonia are often the cleaning agents and they are especially dangerous in aerosols.



Less-toxic Alternatives

Home-made Alternatives

Oven Cleaner I

1 cup or more baking soda

A squirt or two of liquid soap

Sprinkle water generously over the bottom of the oven, then cover the grime with enough baking soda that the surface is totally white. Sprinkle some more water over the top, let sit overnight. Wipe up the next morning. When the worst of the mess is removed, dab a bit of liquid detergent or soap on a sponge and wash the remaining residue from the oven.

(If this recipe doesn't work for you it is probably because you didn't use enough baking soda and/or water.)

Make a paste of baking soda and water and spread on oven interior. Leave overnight with oven door closed. Remove with sponge or nylon scrub pad. SOS pad can be used to remove stubborn bits.



* Tips

While oven is still warm, sprinkle water on the spill, then sprinkle salt on it. When the oven cools down, scrape the spill away and wash the area.





Toilet Bowl Cleaner and Deodorizer

Many toilet bowl cleaners are often highly caustic and form toxic gases when mixed with water. They can contain ammonium chloride, a corrosive, 1,4-dichlorobenzine, a carcinogenic pesticide which can cause liver and kidney damage, hydrochloric acid, whose vapors can cause coughing and breathing difficulties, and sodium dichloroisocyanurate dihydrate which is a severe eye, skin and respiratory irritant, which can form carcinogenic chlorine gas. Sulfate-based products containing sodium sulfate or sodium bisulfate may cause asthmatic attacks.

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Less-toxic Alternatives

Hydrogen peroxide - drug store dilution

♥ Home-made Alternatives

To remove mineral buildup, put 1-2 denture cleaner tablets in bowl and let sit overnight, then clean.

Pour one can of Coke in toilet.

Use undiluted white vinegar to scrub the inside of the toilet bowl. First dump a bucket of water into the toilet to force water out of the bowl and allow access to the sides. Pour undiluted white vinegar around the bowl and scrub with a toilet brush to remove lime, stains and odor.



Copper and Brass Cleaner

Many commercial brass and copper cleaning products contain formaldehyde and other harsh chemical ingredients that release harmful fumes known to irritate respiratory systems. The gases released from these products are VOC's which can trigger asthma attacks and allergic reactions.



Less-toxic Alternatives



Home-made Alternatives

Lemon juice Salt, non-iodized Cornstarch

Directions:

Mix equal parts of salt and cornstarch with lemon juice to make a paste. Apply to surface with soft rag. Rub gently. Rinse with warm water and mild dish soap. Dry with a soft cloth.



* Tips

Not for use on lacquered finishes.

Fragrant Kitchen Cleaner

Kitchen cleaners contain many toxic chemicals that are harmful to you and the environment. Many cleaners contain allergens and irritants that cause respiratory system damage or irritant.



Less-toxic Alternatives



Home-made Alternatives

Ingredients:

- 2 TBSP. White vinegar
- 2 pints water
- 4 drops essential oils

Direction:

Combine all ingredients in a spray bottle and use as a final rinse after cleaning surfaces. Store in a cool, dark place.





Garbage Can Deodorizer

Many deodorizers contain VOC's that can trigger asthma attacks and allergic reactions. Garbage can deodorizers fall into the same category as air fresheners. See air fresheners to understand the harmful chemicals they contain.



Less-toxic Alternatives

Home-made Alternatives

Ingredients:

1 cup baking soda

1 tsp. tea tree oil

Directions:

Mix together in a small bowl, working out all the lumps with a fork. Sprinkle the mixture in the bottom of the trash can after the liner is removed. Periodically rinse container with white vinegar and dry in the sun.

Garbage Disposal Cleaner



Less-toxic Alternatives

Home-made Alternatives

Ingredients:

1 cup ice

Used lemon or orange rind

Directions:

To eliminate garbage disposal odors and clean and sharpen blades, grind ice and rinds until pulverized.



No-Streak Glass Cleaner

Windex contains ammonium hydroxide which is a known respiratory irritant that can damage eyesight and the skin. It is a moderate concern for asthmatics and for those who suffer from respiratory ailments. Some studies have shown that some chemicals in Windex can cause kidney and liver damage.



Less-toxic Alternatives



Home-made Alternatives

Ingredients:

1/4 cup white vinegar

1 TBSP. cornstarch

2 quarts warm water

Directions:

Mix the ingredients and apply with a sponge or pour into spray bottle and spray on. For lint-free results, wipe dry with crumpled newspaper, buff to a shine.

Laminate Floor Cleaner

See floor cleaner for health effects



Less-toxic Alternatives



Home-made Alternatives

Ingredients:

1/2 cup white vinegar

1 gal. warm water

Direction:

Mix ingredients. Avoid over wetting the floor by using a spray bottle to apply the mixture to the floor. Mop as usual. (microfiber mops work best)





Mirror and Window Polish

See no-streak glass cleaner for health effects.



Less-toxic Alternatives



Home-made Alternatives

Ingredients:

Cornstarch

Water

Directions:

Mix together cornstarch and water to make a paste. Use a soft cloth to apply the paste to the mirror. Rub gently then wipe clean with a soft cloth.

Refrigerator Cleaner



Less-toxic Alternatives



Home-made Alternatives

Ingredients:

2 TBSP. baking soda

1 quart warm water

Directions:

Dissolve baking soda in water. Use to wipe all surfaces inside and out. For stubborn spots, rub with baking soda paste. Be sure to rinse with a clean, wet cloth.



Plumbing Fixture Cleaner #1



Less-toxic Alternatives

Home-made Alternatives

Use to clean stainless steel, chrome, fiberglass, ceramic porcelain or enamel fixtures

Ingredients:

2 TBSP. baking soda

1 quart water

Directions:

Dissolve the baking soda in the water. Wipe on the fixture then rinse.

Plumbing Fixture Cleaner #2



Less-toxic Alternatives

Home-made Alternatives

Hard lime deposits around faucets can be softened for easy removal by covering the deposits with vinegar-soaked paper towels.

Ingredients:

white vinegar

Paper towels

Direction:

Soak paper towels in vinegar and leave them on the surface. Wipe clean after about an hour.





Tub and Tile Cleaner



Less-toxic Alternatives

Home-made Alternatives

Ingredients:

White vinegar

Baking soda or non-iodized salt

Directions:

To remove film buildup on bathtubs, apply vinegar full-strength to a sponge and wipe. Next, use baking soda or salt as you would a scouring powder. Rub with a damp sponge and rinse thoroughly with clean water.

Wood Cleaner



Less-toxic Alternatives

Home-made Alternatives

Ingredients:

2 TBSP. Olive oil

2 TBSP. White vinegar

1/4 cup lemon juice

Directions:

Mix ingredients. Using a soft cloth, rub into wood, in the direction of the grain.



Definitions

Carcinogen – a substance capable of causing cancer in living tissue.

Corrosive – tending to cause corrosion.

DDT – (dichloro-diphenyl-trichloroethane) was developed as the first of the modern synthetic insecticides in the 1940s. It was initially used with great effect to combat malaria, typhus, and the other insect-borne human diseases among both military and civilian populations.

Dioxin - Dioxins are known carcinogens and endocrine disruptors, and people are primarily exposed through consumption of animal and other food products. Babies can be exposed through breast milk. Though dioxin levels have been declining over the last few decades as a result of federal regulatory actions; most people still have significant levels of the chemical in their bodies.

Neurotoxin, neurotoxic - are substances that are poisonous or destructive to nerve tissue.

Nitrosamines - are potent carcinogens which can induce tumor growth in humans. A number of studies have found that nitrosamines play a role in the pathogenesis of gastric and colon cancers.

Sensitizer - are materials that can cause severe skin and/or respiratory responses in a sensitized worker after exposure to a very small amount of the material. Sensitization develops over time. When a worker is first exposed to a sensitizer, there may be no obvious reaction.

Synthetic - noting or pertaining to compounds formed through a chemical process by human agency, as opposed to those of natural origin.

VOC - Volatile Organic Compound— are emitted as gases from certain solid and liquids. They include a variety of chemicals, some of which may have short— and long-term adverse health effects.

